

Use of Digital Resources in Higher Educational Institutions: A Study Among Affiliated Colleges in SV University

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This paper highlights the mode of learning to access ICT based resources, purpose of using ICT based resources, time spend for accessing e-resources, experience in using ICT based resources and satisfaction level of using ICT based resources by the users of Degree and PG Colleges affiliated to Sri Venkateswara University, Tirupati. ICT based resources and services are resources in which information is stored electronically and which are accessible through electronic systems and networks. ICT based resources and services is a very broad term that includes a variety of different publishing models, including OPACs, CD-ROMs, online database, e-journals, e-books, internet resource, print-on-demand (POD) e-mail publishing, wireless publishing, electronic link and web publishing etc.

Key words: Information and Communication Technology, Digital resources, Degree & PG Colleges, Tirupati, Reading environment.

Introduction

In the recent years, libraries have witnessed great metamorphosis both in the collection development and the service structure. A significant transformation has been noticed in collection development policies and practices due to availability of ICT based resource and services in plenty and had easy access to these resources. Print medium is increasingly giving way to the resources that are produced in electronic / digital formats. The availability of CD-ROM, DVDs and other online resources of bibliographical and full-text databases is quite common in the majority of the university and college libraries. The libraries have an option to subscribe to these full-text databases as part of their digital collection. Most of the important publishers now offer web-enabled interfaces and full text of their journals. some of the important full-text digital collections available on CD-ROM or online include Automatic Digital Online Information System (ADONIS), IEEE Electronic Library (IEL), Computer Application Binary Interface Database (ABI / INFROM) and Library and General Periodicals, E-space, worlds, US Patents, etc. ICT based resources and services are resources in which information is stored electronically and which are accessible through electronic systems and networks. In this context the term means “any electronic product that delivers collection of data be it in text, numerical, graphical, or time based, as a commercially available resource.

Objectives of the Study

The objectives of the study are:

- To study the purpose and time spent on using ICT based resources and services among the users of Degree & PG Colleges.
- To identify the method of acquiring IT skills by the users of Arts and Science Colleges.

- To identify the experience in using ICT based resources by the users of Degree & PG Colleges.
- To identify the most commonly search engine used by the users of Degree & PG Colleges.
- To find out the extent of dependency on ICT based resources and services for learning among the users of Degree & PG Colleges affiliated to Sri Venkateswara University, Tirupati.
- To identify the problems faced by the users of Degree & PG Colleges affiliated to Sri Venkateswara University, Tirupati while accessing and using electronic resources.

Sampling

There are many Degree and PG colleges, existing in and around Tirupati which have been affiliated to SV University Tirupati. The researcher has selected the respondents from the colleges established on the basis of year of establishment. The researcher has employed a well-structured questionnaire for collecting the data from the respondents. A total number of 1600 questionnaires were distributed among the Degree students, PG students, and Faculty members only 1561 out of 1600 respondents among whom the questionnaires were distributed. This constitutes 97.56% (1561 / 1600) of the total response.

Methodology

The survey method was used to collect primary data on this research investigation. The pertinent data has been collected from the Degree students, PG students, and Faculty members, by administering the questionnaire method. The respondents were encouraged to give free and frank information. The respondents extended their full cooperation in the data collection.

Data Analysis

The collected data were classified and tabulated according to the objectives and hypothesis stated. For proper arrangement of data, a master table was prepared by the author. The general data interpretation was made with the help of percentages and averages.

Analysis and Interpretation

Table1 Distribution of respondents frequency of visit to the library

Respondents	Daily	Twice in a week	Once in a week	Once in a month	Occasionally	Total
Degree Students	407(53.13)	212 (27.68)	68 (8.88)	27 (3.52)	52 (6.79)	766
PG Students	210(39.62)	121 (22.83)	94 (17.74)	59 (11.13)	46 (8.68)	530
Faculty Members	101(38.11)	72 (27.17)	31 (11.70)	25 (9.43)	46 (13.58)	265
Total	718(46.00)	405 (25.94)	193(12.36)	111 (7.11)	134 (8.58)	1561

(Figures in Parentheses denote Percentage)

Table 1 indicates that the distribution of respondent's frequency of visit to the library. It is identified that among the total 1561 respondents 718 (46%) of the respondents visit the library daily, followed by 405 (25.94%) of respondents used to visit the library twice in a week, 193

(12.36%) of the respondents visit the library once a week, 134 (8.58%) of respondents used to visit the library occasionally and the remaining 111 (7.11%) respondent visit the library once in a month. Among 766 Degree pursuing students, majority (53.13%) of respondents used to visit the library daily followed by (27.68%) of them visit twice in a week, followed by (8.88%) once in a week, (6.79%) occasionally and very few of them (3.52%) used to visit the library once in a month. Among the 530 PG students, (39.62%) of respondents used to visit the library daily followed by (22.83%) visit twice in a week and only (8.68%) of respondents visit the library occasionally. It is clear that among 265 faculty members, majority (38.11%) of respondents have visited the library daily followed by (27.17%) once in a week and only (9.43%) of respondents visit the library once in a month.

Table 2 Distribution of respondents stating the type of CD-ROM resources used

Respondents	Reference Books CD	Indexing and Abstracting CD	Full text Journal CD	Electronic Book CD	Statistics like census report	Music and Film CD	Any other	Total
Degree Students	130 (16.97)	191 (24.93)	181 (23.63)	62 (8.09)	57 (7.44)	77 (10.05)	68 (8.88)	766
PG Students	121 (22.83)	97 (18.30)	107 (20.19)	110 (20.75)	57 (10.75)	21 (3.96)	17 (3.21)	530
Faculty Members	45 (16.98)	45 (16.98)	48 (18.11)	22 (8.30)	45 (16.98)	15 (5.66)	45 (16.98)	265
Total	296 (18.96)	333 (21.33)	336 (21.52)	194 (12.43)	159 (10.19)	113 (7.24)	13 (8.33)	1561

A question has been asked the respondents to know the type of CD ROM resources used for their academic purpose. Table 2 illustrates that (21.52%) among the total respondents have preferred to use Full text journal, followed by indexing and abstracting (21.33%), CD of Reference Books (18.96%), Electronic Books in CD form (12.43%), CD version of Statistics like census report (10.19%) any other CD (8.33%), Music and Film CD (7.24%). It is clear that majority of the Degree students (24.93%) preferred to use indexing and abstracting CDs followed by (23.63%) preferred to use full text journals, followed by (16.97%) reference books CDs, and very few percent of respondents 7.44 census report. With regard to 530 PG students, majority (22.83%) preferred the CDs of reference books, followed by (20.75%) electronic book CDs, (20.19%) use e journals, and only (7.24%) of them used to watch Musing and Films. Among 265 faculty members, majority (18.11%) of the respondents have showed interest to use full text journals, followed by (16.98%) of them preferred CDs of reference books, indexing and abstracting, census report.

Table 3 Type of search engines used

Respondents	Google	Excite	Info seek	Lycos	Alta Vista	MSN	Yahoo	Ask.com	Total
Degree Students	340 (44.39)	30 (3.92)	12 (1.57)	21 (2.74)	36 (4.70)	39 (5.09)	39 (5.09)	80 (10.44)	766
PG Students	169 (31.89)	35 (6.60)	19 (3.58)	36 (6.79)	33 (6.23)	70 (13.21)	70 (13.21)	57 (10.75)	530
Faculty Members	90 (33.96)	15 (5.66)	11 (4.15)	19 (7.17)	26 (9.81)	29 (1.94)	29 (1.94)	23 (8.68)	265
Total	599 (38.37)	80 (5.12)	42 (2.69)	76 (6.09)	95 (6.09)	95 (6.09)	138 (8.84)	160 (10.25)	1561

It is clear from the above table that the distribution of respondents views on search engine they used for attaining information. It is noticed that among the total 1561 respondents, 599 (38.37%) respondents have used Google Search Engine, 160 (10.25%) respondents have used Ask.Com,138 (8.84%) Yahoo, (6.09%) MSN and others only 2.69% Info seek.

It shows that among 766 Degree students, majority (44.39%) of the respondents have used Google and (1.57%) percent of them have used Info Seek search engine. Out of 530 PG students 31.89 percent of them have used Google search engine and 3.58 percent of them have used Info seek search engine. Among 265 faculty members, majority (33.96%) of the respondents have expressed that they use Google search engines for gathering information followed by (9.81%) depend on Alta vista and 1.95 percent of them have used MSN and Yahoo search engine.

Table 4 Distribution of respondents with regard to use the e resources for their academic purpose

Respondents	E-journals	E-books	Online database	Online thesis	Online news	Online magazine	Website information	Library catalogue	Other	Total
Degree Students	220 (28.72)	35 (4.56)	91 (11.88)	12 (1.57)	109 (14.23)	74 (9.66)	105 (13.71)	18 (2.35)	102 (13.32)	766
PG Students	149 (28.11)	29 (5.47)	105 (19.81)	18 (3.40)	41 (7.74)	29 (5.47)	67 (12.64)	20 (3.77)	72 (13.58)	530
Faculty Members	91 (34.34)	15 (5.66)	50 (18.87)	25 (9.43)	11 (4.15)	8 (3.02)	31 (11.70)	13 (4.91)	21 (7.92)	265
Total	460 (29.47)	79 (5.06)	246 (15.76)	55 (3.52)	161 (10.31)	111 (7.11)	203 (13.00)	51 (3.27)	195 (12.40)	1561

(Figures in Parentheses denote Percentage)

The details of the various types of ICT based resources used by the respondents are presented in table 4. It is obvious from the above table that 460 (29,47%) of the respondents have been accustomed to use e-journals, followed by 246(15.76%) of the respondents used online databases, 203 (13.00%) respondents used Website information, 195 (12.40%) preferred other sources, 161 (10.31%) respondents used online newspapers, 111 (7.11%) respondents used online Magazines, 79 (5.06%) follow e books, 55 (3.52%) respondents used on line thesis, 51 (3.27%) respondents used library catalogue. Majority (28.72%) of the Degree students preferred to use e journals, followed by (14.23%) read online newspapers, and very few percent (1.57%) of them use e thesis. In the same way majority (28.11%) of the PG students used to read e journals, followed by (19.81%) online database, and only (3.77%) among them tried to use library catalogue. Similarly majority (34.34%) of the respondents from faculty category used to read e journals, followed by (18.87%) use e database, a few respondents (3.02%) use e magazines.

Table 5 Distribution of respondents regarding which methods used for reading full text ICT based resources

Respondents	Computer screen	Print out	Down loading	Any other	Total
Degree Students	384 (50.13)	164 (21.41)	128 (16.71)	90 (11.75)	766
PG Students	281 (53.02)	135 (26.47)	73 (13.77)	41 (7.74)	530
Faculty Members	108 (40.75)	70 (26.42)	66 (24.91)	21 (7.92)	265
Total	773 (49.52)	369 (23.64)	267 (17.10)	152 (9.74)	1561

(Figures in Parentheses denote Percentage)

Table No 5 illustrates the distribution of respondents regarding which kind of methods they have been used for reading full text e-resources. It is clear that out of 1561 sample respondents, 773 (59.52%) respondents have used computer screen, followed by 369 (23.64%) of respondents have used print out, 267 (17.10%) of the respondents have used

down loading and the remaining 152 (9.74%) of respondents have used other methods for reading full text ICT based resources and services. With regard to Degree students, (50.13%) of the respondents used computer screen followed by (21.41%) of them tried to have the print outs for reading full text ICT based resources, and only (11.75%) among them expressed that they use other source for reading.

It is clear that (53.02%) of PG students, read through computer screen, followed by (26.47%) tried to get print outs, only (7.74%) go for other method for the same. It is obvious that most (40.75%) of the respondents from faculty members preferred to use computer screen followed by (26.42%) preferred to get print outs (24.91%) of the respondents use downloaded material for their reading purpose and the remaining (7.92%) of them used other methods.

Table 6 Gender-wise distribution of respondents methods used for reading full text ICT based resource.

Respondents	Computer screen	Print out	Down loading	Any other	Total
Male	627 (57.21)	171 (15.60)	181 (16.51)	117 (10.68)	1096
Female	146 (31.40)	198 (42.58)	86 (18.49)	35 (7.53)	465
Total	773 (49.52)	369 (23.64)	267 (17.10)	152 (9.74)	1561

(Figures in Parentheses denote Percentage)

A study has been conducted to know about the gender wise distribution of respondents regarding the methods used to read full text ICT database. It is clear that most (57.21%) if the male respondents preferred to use computer screen, followed by 181(16.51%) preferred to use downloading material followed by 117(15.68%) and only (19.68%)used to follow any other material. In the same way majority198 (42.58%) female respondents have used computer based resources, followed by (31.40%) of the respondents preferred to use computer screen and only 9.74% of them use any other material.

Table 7 Distribution of respondents regarding their preference to download the articles in different formats.

Respondents	PDF	HTML	Word Format	Other	Total
Degree Students	382(49.87)	130 (16.97)	220 (28.72)	34 (4.44)	766
PG Students	290 (54.72)	70 (13.21)	150 (28.30)	20 (3.77)	530
Faculty Members	130 (49.06)	48 (18.11)	70 (26.42)	17 (6.42)	265
Total	802 (51.38)	248 (15.89)	440 (28.19)	71 (4.55)	1561

(Figures in Parentheses denote Percentage)

Table 7 explains that the distribution of respondents regarding their preference of format to download articles. It is clear that out of 1561 respondents 802 (51.38%) of the respondents preferred the PDF format for downloading articles, followed by 248 (15.89%) respondents preferred HTML format, 440 (28.19%) respondents preferred word format and 71 (4.55%) respondents preferred other format for downloading articles. It could be seen clearly from the above discussion that more than 51.38 percent of the respondents preferred PDF format for downloading articles. Out of 766 Degree students, most of the respondents 382 (49.87%) preferred word downloading articles, 130 (16.97%) respondents preferred HTML format, 220 (28.72%) respondents preferred word format and 34 (4.44%) respondents preferred other format. In the same way most of the respondents (54.72%) prefer PDF format followed by (28.30%) word format, (18.11%) use HTML and very few respondents (3.77%) follow other

format. Majority (49.06%) of respondents from faculty position prefer PDF format, followed by (26.42%) word format, followed by (18.11%) HTML format and the remaining (6.42%) go for other format.

Table 8 Gender wise distribution of respondents regarding their preference to download the articles.

Respondents	PDF	HTML	Word Format	Other	Total
Male	610(55.65)	167(15.23)	276(25.18)	43(3.92)	1096
Female	192(41.29)	81(17.42)	164(35.27)	28(6.02)	465
Total	802(51.38)	248(15.89)	440(28.19)	71(4.55)	1561

(Figures in Parentheses denote Percentage)

It is clear from the Table No 8 that most of the male respondents (55.65%) prefer to use PDF to download articles, followed by (25.18%) word format, (15.23%) go for HTML format, and the remaining (3.92%) prefer other format to down load articles. In the same way majority (41.29%) of the female respondents use PDF format, followed by (35.27%) go for word format, (17.42%) HTML and the remaining (6.02%) use other format.

Findings and Conclusion

The findings of the study stated that majority of the respondents used to visit the library daily. It is noticed that majority of the respondents use google as their search engine to get information. Majority of the respondents use full text journal CDs for reading. Majority of the PG students use Reference book CDs. All categories of respondents use e journals when they prefer to read. All categories of respondents preferred to read through computer screen while reading. Bothe male and female respondents follow computer screen reading. It is noticed that majority of the respondents from all categories use PDF format. In the same way both male and female respondents also continue the same trend to read the PDF format than other formats.

Recommendations:

- It is suggested that necessary steps should be taken to improve the reading habits among the PG students to visit the library daily to use the available e resources.
- The staff of the concerned library should motivate the respondents towards the reading of all sorts of CDs.
- It is suggested them to get print outs which facilitates the respondents to read with more interest.
- Respondents must be motivated to have the word format which is more convenient to modify the information from time to time whenever required.

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